REMARKS

Summary of Office Action

Claims 1-14, 17-23, 25-30, 33-43, 46-49, 52, 53, 56, 57 and 60-73 were pending in the above-identified patent application. Of those, each of claims 60 and 61 has been withdrawn from consideration as being drawn to a nonelected invention, and each of claims 62-73 has been withdrawn from consideration as being drawn to a nonelected species.

The Examiner rejected claims 1-14, 17-23, 25-30, 33-43, 46-49, 52, 53, 56, 57 under 35 U.S.C. § 103(a) as allegedly being obvious from certain prior art allegedly admitted by applicant, in view of Pilipovic U.S. Patent 6,456,982.

Applicant's Reply

This reply is accompanied by a Request for Continued Examination. Accordingly, the finality of the November 10, 2010 Office Action should be considered withdrawn and this reply, and the amendments herein, are to be entered as a matter of right.

Applicant has amended claims 1, 3, 6-8, 21, 22, 27, 28, 35, 37, 40, 41, 48, 52 and 56, and has cancelled claims 2, 4, 5, 17-20, 23, 25, 26, 33, 34, 36, 38, 39, 46, 47, 49, 53 and 57 without prejudice, in order to more particularly define the invention. The Examiner's rejection is respectfully traversed.

The Examiner's position is that the example of Brownian motion in applicant's FIG. 1, as described in Paragraph [0029] of the specification, teaches applicant's data gathering and comparison steps, as well as the formerly-claimed limitation of concluding that the system is varying erratically when the actual range equals the expected range. The Examiner then notes that in a method claim, only one of the "when said first range" limitations has to be taught by a reference to establish unpatentability. Finally, the Examiner

then relies on Pilipovic for the use of Brownian motion to analyze financial systems, as well as for certain hardware aspects of the apparatus claims, to find the claims obvious in combination with the allegedly admitted prior art.

There are at least four reasons why the Examiner's rejection should be withdrawn.

First, in a previous reply, applicant deleted the "when said first range is equal" limitation from the claims. That was the only one of the three "scenarios" in the claims that the Examiner alleged could be found in the allegedly admitted prior art. The scenarios remaining in the claims are not in the allegedly admitted prior art, even according to the Examiner. Therefore, even if the Examiner is correct (applicant disagrees as noted below) that only one of the scenarios must be shown, the allegedly admitted prior art does not show even one of the claimed scenarios and the Section 103 rejection should be withdrawn for that reason alone.

Second, as previously noted, applicant disagrees that only one of the "when said first range" limitations needs to be shown to render the claim unpatentable. As applicant noted in the previous reply, because the "when" scenarios are positively recited in the logical conjunctive ("X and Y") rather than in the logical alternative ("X or Y" or "one of X and Y"), they cover only situations where the method (or apparatus) meets both of the recited "when" scenarios (even though it cannot meet both at once). The Examiner has not addressed this issue, but it is another reason why the Section 103 rejection should be withdrawn.

Third, applicant continues to disagree that Pilipovic teaches the use of Brownian motion to analyze financial systems. Pilipovic describes earlier prior art that Pilipovic alleges uses Brownian motion, but Pilipovic itself teaches away from the use of Brownian motion to analyze financial systems. With regard to Brownian motion, which is described in Pilipovic only in the background section along

with other techniques, Pilipovic says (column 4, lines-57-58), "Unfortunately, the above-described methods have drawbacks that have not been solved in the prior art." Pilipovic then goes on to describe and claim its own method. Therefore, one of ordinary skill in the art, reading Pilipovic, would not be led to try Brownian motion analysis to analyze financial markets, and indeed would be taught not to use Brownian motion analysis. Therefore, Pilipovic cannot be combined with the allegedly admitted prior art to render obvious applicant's claims, and the Section 103 rejection should be withdrawn for this reason as well.

Fourth, with regard to claims 35, 37, 40-43 and 56, the Examiner continues to note that any processor of the prior art would meet those claims unless the processor were claimed as being programmed to accomplish the specific function (which would transform it into a special-purpose machine). Applicant had previously amended those claims, along with other claims now cancelled, in accordance with the Examiner's suggestion in the previous Office Action and respectfully submits that to the extent that any portion of the rejection is based on the form of claims 35, 37, 40-43 and 56, that portion of the rejection had been overcome by those previous amendments and should be withdrawn.

Beyond the four foregoing reasons that the rejection should be withdrawn, applicant has amended the claims in order to more particularly define the invention.

To the extent that Pilipovic describes earlier prior art as using Brownian motion, applicant believes that any such prior art, as described in Pilipovic, is not truly based on Brownian motion in that it is described as including a random component and, for reasons previously advanced by applicant, applicant believes that Brownian motion is not random at all.

In any event, whether Brownian motion is random or not, applicant's claims, as amended, no longer recite Brownian motion. Instead, applicant's various claims define the

gathering of data over various different time periods and the comparison of ratios of ranges of data over those time periods to the relationship of the time periods (a "square-root-of-time" relationship). To the extent that the Examiner has asserted in the past that the allegedly admitted prior art shows these relationships, applicant disagrees. The allegedly admitted prior art at most shows that Brownian motion results in one particular relationship, which is no longer one of the scenarios in applicant's claims (even if only one scenario is needed) and indeed was removed from applicant's claims in the previous reply.

The allegedly admitted prior art does not show the particular arrangements of multiple time periods defined by applicant's independent claims, and certainly does not show the complicated arrangements of multiple time periods with different starting times defined in amended claims 6-8, 21, 27 and 40, nor does it show the predictions defined in claims 10 and 11.

Neither Pilipovic nor the prior art referred to by Pilipovic shows those particulars either.

First, the prior art referred to by Pilipovic at most describes the bare use of Brownian motion, even if under a misapprehension of what Brownian motion is. It does not describe any particulars as defined by applicant's claims.

Second, Pilipovic itself does not describe the claimed particulars. The Examiner points to column 7, lines 50-62, column 10, lines 35-59, and claim 41 of Pilipovic. However, the claimed particulars are not shown in those passages, nor anywhere else in Pilipovic.

For at least these reasons, applicant respectfully submits that the claims, as amended, are patentable over the references relied on by the Examiner.

Reservation of Rights

The amendments presented herein are being made solely in order to advance the prosecution of this application. Applicant does not surrender any subject matter thereby, and hereby expressly reserves the right to pursue, in one or more continuing applications, any one or more of the claims as they existed prior to the current amendment, as well as any nonelected invention or species.

Request for Personal Interview

Applicant respectfully request that if, after review of this reply, the Examiner is still inclined to reject the above-identified patent application, the Examiner first telephone the undersigned to arrange a personal interview at the Patent and Trademark Office.

Conclusion

For at least the reasons set forth above, applicant respectfully submits that this application, as amended, is in condition for allowance. Reconsideration and prompt allowance of this application are respectfully requested.

Respectfully submitted,

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